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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Lloyd A. Green

Docket No.:

5199-69

Serial No.:

10/809,312

Examiner:

to be assigned

Filed:

March 24, 2004

Group Art Unit: 1636

Title:

METHODS FOR REGULATING DIFFERENTIATION OF

NEURAL CELLS AND USES THEREOF

November 10, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97(b)

Sir:

In accordance with the duty of disclosure under 37 CFR §1.56, applicant hereby notifies the U. S. Patent and Trademark Office of the following documents, which are listed on the attached PTO/SB/08A and PTO/SB/08B forms. The examiner may deem these documents to be relevant to patentability of the claims of the above-identified application. Copies of the documents are enclosed for the examiner's convenience.

The submission of the listed documents is not intended as an admission that any of the documents constitute prior art against the claims of the present application. Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicants respectfully request that the listed documents be considered by the examiner and be made of record in the present application and that initialed copies of Forms PTO/SB/08A and PTO/SB/08B be returned in accordance with MPEP §609.

It is understood that no fee is necessary for submission of this Information Disclosure Statement, because it is being filed before the later of three months from the filing date or the mailing of the first Office Action on the merits. The Commissioner is hereby authorized to charge payment of any fees associated with this application or credit any overpayment to Deposit Account No. 02-4270.

Respectfully submitted,

Todd Holmbo

Reg. No. 42,665

Attorney for Applicants

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PTO/SB/21 (08-03) Approved for use through 08/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application Number 10/809.312 TRANSMITTAL Filing Date 03/24/04 **FORM** First Named Inventor Lloyd A. Greene Art Unit 1636 (to be used for all correspondence after initial filing) **Examiner Name** to be assigned Attorney Docket Number 5199-69 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Technology Center (TC) Appeal Communication to Board Licensing-related Papers of Appeals and Interferences Fee Attached Appeal Communication to TC Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Terminal Disclaimer Extension of Time Request Identify below): Return receipt postcard Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Remarks Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Todd Holmbo, Reg. No. 42,665 Individual name Signature Date 11/10/04 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name Ping Xiao ingliano 11/10/04 Signature

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/809,312			
Filing Date	03/24/04			
First Named Inventor	Lloyd A. Greene			
Art Unit	1636			
Examiner Name	to be assigned			
Attorney Docket Number	5199-69			

			U. S. PATEN	T DOCUMENTS		
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US- C 070 000	00.04.04	Jahanaa at al	1 32 2 2 3 7 7 7 7	
		^{US-} 6,278,039	08-21-01	Johnson, et al.		
		^{US-} 2002/0006664	01-17-02	Sabatini, et al.		
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Examiner Cite Initials* No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
	Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶
	WO99/32619	07-01-99	Fire, et al.		
	WO01/29058	04-26-01	Mello, et al.		
	WO01/68836	09-20-01	Beach, et al.		
	WO01/96584	12-20-01	Mushegian,etal.		

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INF	ORMATION	I DIS	CLOSURE	Filing Date	03/24/04
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Sheet	1	of	12	Attorney Docket Number	5199-69

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Ahmed et al., BDNF enhances the differentiation but not the survival of CNS stem cell-derived neuronal precursors.	
		J. Neurosci., 15: 5765-5778, 1995	
		Angelastro et al., Identification of diverse nerve growth factor-regulated genes by serial analysis of gene expression (SAGE) profiling.	
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Signature	Considered	

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INFORMATION DISCLOSURE	Filing Date	03/24/04
STATEMENT BY APPLICANT	First Named Inventor	Lloyd A. Greene
(1)	Art Unit	1636
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Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	T
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Barco et al., Expression of constitutively active CREB protein facilitates the late phase of long-term potentiation by enhancing synaptic capture.	
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		Proc. Natl. Acad. Sci. USA, 98: 14428-14433, 2001	

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Substitute Ist Istill 1445/115				Application Number	10/809,312	
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Sheet	3	of	12	Attorney Docket Number	5199-69	

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		Burstein and Greene, Evidence for RNA synthesis-dependent and –independent pathways in stimulation of neurite outgrowth by nerve growth factor.	
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		Ann. N. Y. Acad. Sci., 865: 274-289, 1998	

Examiner	Date	
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		Escobar et al., RNAi-mediated oncogene silencing confers resistance to crown gall tumorigenesis.	
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		progenitor cells during early development stages of the rat cerebral cortex.	
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		Gage, F.H., Mammalian neural stem cells.	
		Science, 287: 1433-1438, 2000	

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		Ghosh and Greenberg, Distinct roles for bFGF and NT-3 in the regulation of cortical neurogenesis.	
		Neuron, 15: 89-103, 1995	
		Greene et al., Establishment of a noradrenergic clonal line of rat adrenal pheochromocytoma cells which respond to nerve growth factor.	
		Proc. Natl. Acad Sci. USA, 73: 2424-2428, 1998	
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		(Cambridge, MA: The MIT Press, 1998) pp. 161-187. (N/A)	
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Signature	Considered	- 1

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Sheet	6	of	12	Attorney Docket Number	5199-69

		NON PATENT LITERATURE DOCUMENTS	
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		Julius et al., Q vectors, bicistronic retroviral vectors for gene transfer.	
		Biotechniques, 28: 702-708, 2000	
		Kintner, C., Neurogenesis in embryos and in adult neural stem cells.	
		J. Neurosci., 22: 639-643, 2002	
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		Kukekov et al., A nestin-negative precursor cell from the adult mouse brain gives rise to neurons and glia.	
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		Exp. Neurol., 156: 333-344, 1999	

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		Laywell et al., Multipotent neurospheres can be derived from forebrain subependymal zone and spinal cord of adult mice after protracted	
		postmortem intervals.	
		Exp. Neurol., 156: 430-433, 1999	
		Laywell et al., Identification of a multipotent astrocytic stem cell in the immature and adult mouse brain.	
		Proc. Natl. Acad. Sci. USA, 97: 13883-13888, 2000	
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		Lendahl et al., CNS stem cells express a new class of intermediate filament protein.	
		Cell, 60: 585-595, 1990	

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Substitu	te for form 1449/PTO			Complete if Known		
Gabbana	10 10 10 11 1440 10			Application Number	10/809,312	
INF	ORMATION	DIS	CLOSURE	Filing Date	03/24/04	
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Lloyd A. Greene	
	///			Art Unit	1636	
	(Use as many she	eis as n	ecessary)	Examiner Name	to be assigned	
Sheet	8	of	12	Attorney Docket Number	5199-69	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Li et al., Neuronal differentiation of precursors in the neocortical ventricular zone is triggered by BMP.	
		J. Neurosci., 18: 8853-8862, 1998	
		Lonze et al., Apoptosis, axonal growth defects, and degeneration of peripheral neurons in mice lacking CREB.	
		Neuron, 34: 371-385, 2002	
		Lu et al., The herpesvirus transactivator VP16 mimics a human basic domain leucine zipper protein, luman, in its interaction with HCF.	
		J. Virol., 72: 6291-6297, 1998	
		Mendelsohn et al., Stromal cells mediate retinoid-dependent functions essential for renal development.	
-		Development, 126: 1139-1148, 1999	
_		Moitra et al., Life without white fat: a transgenic mouse.	
		Genes Dev., 12: 3168-3181, 1998	

Examiner	Date	
Signature	 Considered	

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		number(s), publisher, city and/or country where published. Moll et al., Attractive interhelical electrostatic interactions in the prolineand acidic-rich region (PAR) leucine zipper subfamily preclude	
		preclude heterodimerization with other basic leucine zipper subfamilies.	
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		Mol. Cell Biol., 19: 5001-5013, 1999	

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		Persengiev et al., Inhibition of apoptosis by ATFx: a novel role for a member of the ATF/CREB family of mammalian bZIP transcription factors.	
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		Peters et al., ATF-7, a novel bZIP protein, interacts with the PRL-1 protein-tyrosine phosphatase.	
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		Neuroscience, 44: 393-407, 1991	

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Substitute for form 1449/PTO					Complete if Known
Substitu	ne idi idili 1443/1 10			Application Number	10/809,312
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Application Number 10/8 Filling Date 03/2 First Named Inventor Lloy Art Unit 163	03/24/04				
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Lloyd A. Greene
	///	4		Art Unit	1636
(Use as many sheets as necessary)			ecessary)	Examiner Name	to be assigned
Sheet	11	of	12	Attorney Docket Number	5199-69

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		Towbin et al., Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: procedure and some applications.	
		Proc. Natl. Acad. Sci. USA 76: 4350-4354, 1979	
		Uchida et al., Direct isolation of human central nervous system stem cells.	
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.,		Wilda et al., Killing of leukemic cells with a BCR/ABL fusion gene RNA interference (RNAi).	
		Oncogene, 21: 5716-5724, 2002	

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		Yin et al., AC133, a novel marker for human hematopoietic stem and progenitor cells.	
		Blood, 90: 5002-5012, 1997	
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